

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SCOTT, Roderick John

Appl. No. 10/058,825

Filed: January 30, 2002 Modified Plants Confirmation No. 2437

Examiner: To be assigned

Atty. Docket: 0623.1160001/LBB/GLL

## Second Preliminary Amendment

Commissioner for Patents Washington, D.C. 20231

Sir

For:

In advance of substantive examination in the above identified matter, please amend the application as follows. This amendment is provided in the following format:

- (A) A clean version of each replacement paragraph/section/claim along with clear instructions for entry;
- (B) Starting on a separate page, appropriate remarks and arguments. See 37
- C.F.R. § 1.121 and MPEP § 714; and
- (C) Starting on a separate page, a marked-up version entitled: "Version with markings to show changes made."

## In the Specification:

Please amend the specification as follows:

Please insert the sheet containing the abstract submitted herewith (page 54) at the end of the application.

Please cancel the existing Sequence Listing for the above-identified application, replace it with the substitute Sequence Listing appended hereto, and insert the same at the end of the application.

#### In the Claims:

Please substitute pending claims 1-3, 8-10 and 35 with the following claims 1-3, 8-10 and 35:

- (Once amended) A method for the production of modified endosperm,
  which comprises transforming a plant, or plant propagating material, with a nucleic acid
  molecule comprising one or more regulatory sequences capable of directing expression in
  the male or female germ line and/or gametes of the resultant plant, and one or more
  sequences whose expression or transcription product(s) is/are capable of modulating
  genomic imprinting
- 2. (Once amended) A method for the production of modified endosperm, which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing gynoecium, especially the cell lineage that gives rise to or comprises the female germ line (megasporocyte tissue), within the ovule of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of modulating genomic imprinting.

- 3. (Once amended) A method for the production of modified endosperm which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing stamen, especially the cell lineage that gives rise to or comprises the male germ line (microsporocyte tissue) of the resultant plant and one or more sequences whose expression or transcription product(s) is/are capable of modulating genomic imprinting.
- 8. (Once amended) A method for the production of modified endosperm, which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression in the male or female germ line and/or gametes of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.
- 9. (Once amended) A method for the production of modified endosperm, which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing gynoecium, especially the cell lineage that gives rise to or comprises the female germ line (megasporocyte tissue), within the ovule of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.

- 10. (Once amended) A method for the production of modified endosperm which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing stamen, especially the cell lineage that gives rise to or comprises the male germ line (microsporocyte tissue) of the resultant plant and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.
- 35. (Once amended) A method for modulating genomic imprinting in plants, which comprises transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression in the male or female germ line and/or gametes of the resultant plant, and one or more sequences whose expression or transcription(s) is/are capable of altering the degree of methylation of nucleic acid.

Please add the following new claims:

- (New) A method as claimed in claim 18, wherein the plant to be transformed produces seed in the absence of fertilisation.
- (New) A method as claimed in claim 36, wherein the plant is an apomictic plant.

- 38. (New) The use of a nucleic acid molecule as claimed in claim 23 in overcoming a barrier to endosperm development in seeds of plants.
- 39. (New) The use as claimed in claim 38, wherein the plants produce seed in the absence of fertilisation.

#### Remarks

By the foregoing amendments, Applicant has provided a copy of the abstract on a separate sheet as page 54. The abstract contains the same text as that appearing on the face page of the international application as published.

Applicant has also provided a substitute paper and computer readable copy of the Sequence Listing. The Sequence Listing was updated to add the application number and filling date of the captioned application. Thus, no new matter was added. In accordance with 37 C.F.R. § 1.825(b), the paper copy of the Sequence Listing and the computer readable copy of the Sequence Listing submitted herewith are the same.

Claims 1-3, 8-10 and 35 were amended to place to claims in a better position for allowance. New claims 36-39 were added. Hence, no new matter has been added by the foregoing amendments, and entry and consideration of the same are respectfully requested.

It is not believed that extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Entry of the foregoing amendments and early consideration of the present application are earnestly solicited.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Galy h. hongs not

Gaby L. Longsworth Agent for Applicants Registration No. 47,756

Date: May 21, 2002

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# Version with markings to show changes made

## In the specification

The abstract on page 54 submitted herewith was inserted at the end of the application.

The existing Sequence Listing for the above-identified application was cancelled and replaced with the substitute Sequence Listing appended hereto, which was inserted at the end of the application.

## In the Claims:

Pending claims 1-3, 8-10 and 35 were rewritten as follows:

1. (Once amended) A method for the production of modified endosperm, which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression in the male or female germ line and/or gametes of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of modulating genomic imprinting

- 2. (Once amended) A method for the production of modified endosperm, which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing gynoecium, especially the cell lineage that gives rise to or comprises the female germ line (megasporocyte tissue), within the ovule of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of modulating genomic imprinting.
- 3. (Once amended) A method for the production of modified endosperm which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing stamen, especially the cell lineage that gives rise to or comprises the male germ line (microsporocyte tissue) of the resultant plant and one or more sequences whose expression or transcription product(s) is/are capable of modulating genomic imprinting.
- 8. (Once amended) A method for the production of modified endosperm, which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression in the male or female germ line and/or gametes of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.

- 9. (Once amended) A method for the production of modified endosperm, which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing gynoecium, especially the cell lineage that gives rise to or comprises the female germ line (megasporocyte tissue), within the ovule of the resultant plant, and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.
- 10. (Once amended) A method for the production of modified endosperm which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression within the developing stamen, especially the cell lineage that gives rise to or comprises the male germ line (microsporocyte tissue) of the resultant plant and one or more sequences whose expression or transcription product(s) is/are capable of altering the degree of methylation of nucleic acid.
- 35. (Once amended) A method for modulating genomic imprinting in plants, which comprises [the step of] transforming a plant, or plant propagating material, with a nucleic acid molecule comprising one or more regulatory sequences capable of directing expression in the male or female germ line and/or gametes of the resultant plant, and one or more sequences whose expression or transcription(s) is/are capable of altering the degree of methylation of nucleic acid.

New claims 36-39 were added.